PHYSICS 7600

ELECTROMAGNETIC THEORY I

WINTER 2009

Dynamics of particles and systems including central force motion, coupled oscillations and waves in elastic media. Prerequisites: PHY6610 (PHY7110 is strongly recommended). This is a 3 credit course.

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Office Hours: 10:30 - 11:30 Monday and Wednesday, or by appointment.

Web Page: http://hep.physics.wayne.edu/~harr/courses/7600/w09/


The course will follow the text, and appropriate sections for reading will be given at the start of lecture.

Lectures: MWF 9:30am to 10:20am, Physics Research Building, room 177.

We will schedule one additional hour each week for discussing homework problems, both solutions to graded problems and techniques for solving the assigned problems. We will choose the time during the first week of class. You are encouraged to ask questions; if something isn't clear to you, it likely isn't clear to others in the class as well.

Homework: The practice of Physics requires problem solving skills. In this course you will learn and practice problem solving skills with weekly homework assignments. You may discuss and collaborate with classmates on the problems, but the final solution must be your own. Copying of solutions will result in failure for all parties involved. Your solutions will be collected, graded, and contribute to your final grade. Homework must include explanatory text and be neatly written or it will be given zero credit. The best 12 of 13 homework scores will be used in calculating your grade.

Exams: There will be a mid-term and a final exam. The format of the exams is to be determined.

Grading: Homework  84%  weekly

Mid-term        5%   tbd

Final Exam      10%  tbd
Bonus point 1%
TOTAL 100%

The grade scale is as follows:

- A+ 95 -- 100%
- A 90 -- 95%
- A- 85 -- 90%
- B+ 80 -- 85%
- B 75 -- 80%
- B- 70 -- 75%
- C+ 65 -- 70%
- C 60 -- 65%
- F < 60%

Policies: Late work is not accepted. The lowest homework score will be dropped. You are allowed and encouraged to discuss problems together, but what you turn in must be your own work -- do not copy problem solutions and turn them in as your own work. As a general rule, your classmates should not see the solutions you will turn in, and you should not see their solutions. Follow this link to view the English department's statement on plagiarism and a copy of Wayne State's academic integrity policy.

It is widely known that solutions to many of the problems in Jackson are available from various sources. If you need help with a problem there are other sources you can consult: your instructor, other books on electrodynamics, and your classmates. Copying solutions will result in failure for the class. This is a zero tolerance policy.

Course Content

We will cover chapters 1 to 8 in the text.

Robert Harr

January 8, 2009